IMPACT OF ECONOMIC INDICATORS ON STOCK MARKET PERFORMANCE

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By

VIJAY JARIA

Under the Guidance of

DR. SHEETAL MUNDRA

Associate Professor

JK Lakshmipat University

(Recognized by Govt. of Rajasthan and covered u/s 2(f) of the UGC Act 1956)

LaliyaKa Vas, P.O. Mahapura, Ajmer Road,Jaipur - 302 026(Rajasthan) India

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Sheetal
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IMPACT OF ECONOMIC INDICATORS ON STOCK MARKET PERFORMANCE: A STUDY OF SELECT STOCKS

~~or~~

~~ANALYSIS OF THE~~ IMPACT OF ECONOMIC INDICATORS ON INDIAN STOCK MARKET PERFORMANCE

INTRODUCTION

The economy of India is the tenth-largest in the world by nominal GDP and the third-largest by purchasing power parity. The country is one of the G-20 major economies and a member of BRICS. India is the 19th-largest exporter and the 10th-largest importer in the world. The economy slowed to around 4.5 % for the 2012–13 fiscal year compared with 6.2% in the previous fiscal. On 28 August 2013 the Indian rupee hit an all time low of 68.80 against the US dollar. In India's GDP grew by 9.3% in 2010–11; thus, the growth rate has nearly halved in just three years. GDP growth rose marginally to 4.8% during the quarter through March 2013, from about 4.7% in the previous quarter. The government has forecast a growth rate of 6.1%–6.7% for the year 2013–14, whilst the RBI expects the same to be at 5.7%. Besides this, India suffered a very high fiscal deficit of US$ 88 billion (4.8% of GDP) in the year 2012–13.

In India from last 10 years (2004-13) stock market performed in many ways. Market has seen all time high and big crisis also during the period. The following graph shows the last 10 year's performance of Indian stock market based on SENSEX.

Source: http://www.tradingeconomics.com/india/stock-market

Many studies identified that this behavior of the Indian stock market is due to the change in the Indian economic indicators.

An economic indicator is a statistic about an economic activity. Economic indicators allow analysis of economic performance and predictions of future performance. Economic indicators include various indices, earnings reports, and economic summaries, such as unemployment rate, Consumer Price Index (a measure for inflation), industrial production, Gross Domestic Product, money supply changes.

This study tries to identify how stock market responds on an increase or decrease in various indicators. The purpose of this study is to achieve an understanding of the impact of economic indicators have had on stock market performance in the form of change in BSE SENSEX.

REVIEW OF LITERATURE

The dynamic relationships between macroeconomic variables and share returns have been widely discussed and debated. The informational efficiency of major stock markets has been extensively examined through the study of causal relations between stock price indices and macroeconomic aggregates.

Kwon and Shin (1999) found that the Korean stock market is co integrated with a set of macroeconomic variables. To examine the impact of macroeconomic determinants on stock market development, particularly market capitalization, *Garcia & Liu (1999),* used pooled data from fifteen industrial and developing countries from 1980 to 1995. They found that: (1) real income, saving rate, financial intermediary development, and stock market liquidity are important determinants of stock market capitalization; (2) macroeconomic volatility does not prove significant; and (3) stock market development and financial intermediary development are complements instead of substitutes.

In continuity of this *Chang et al (2000)*, found that the four indicators that demonstrated the strongest correlation with stock price were the index of ten leading indicators, manufacturing and trade sales, CPI, and personal income. *Beck & Levine (2002)* investigated the impact of stock markets and banks on economic growth using a panel data set for the period 1976-98 and they found that stock markets and banks positively influence economic growth and these findings are not due to potential biases induced by simultaneity, omitted variables or unobserved country-specific effects.

Ciora et al (2011) found the role of indicators, in the decision process, to measure economic performance and efficiency is undeniable. The importance of these indicators has led to an increase of the methods throughout companies' measure

performance. They obtained little or no correlation between market indicators and measures that use information from financial statements.

Olweny & Kimani (2011) investigated the causal relationship between stock market performance and economic growth in Kenya for the period 2001-2010, using quarterly secondary data. They found that the movement of stock prices in the Nairobi stock exchange reflect the macroeconomic condition of the country and can therefore be used to predict the future path of economic growth.

Dr. Naliniprava Tripathy (2011) tested the market efficiency and causal relationship between selected Macroeconomic variables and the Indian stock market during the period January 2005 to February 2011.and found the presence of autocorrelation in the Indian stock market and macro economic variables which implies that the market fall into form of Efficient Market Hypothesis. They found bidirectional relationship between interest rate and stock market, exchange rate and stock market, international stock market and BSE volume, exchange rate and BSE volume. The study suggested that any change of exchange rate, interest rate and international market significantly influencing the stock market in the economy and vice versa. The study points out that the Indian stock market is sensitive towards changing behavior of international market, exchange rate and interest rate in the economy and they can be used to predict stock market price fluctuations.

Recent Empirical Studies on the Finance – Growth Relationship Table I

RATIONALE OF THE STUDY

As the review of literature suggests that in the different countries, some of the economic indicators are highly correlated with the performance of stock market

while others have low correlation. Few studies conducted in context of Indian economy and performance of stock market point out that Indian stock market is sensitive towards changing behavior of international market, exchange rate and interest rate in the economy (Dr. Naliniprava Tripathy). Some other studies have pointed out the interpersonal relationship of economic indicators and the performance of stock market.

Generally investors take their decisions based on the relationship of individual indicator with BSE SENSEX. Sometimes the change in individual indicator has great impact and many a times it has no impact on SENSEX because of several other correlated indicators. Therefore the present study would attempt to explore the impact of selective multiple economic indicators on the performance of BSE SENSEX. It would also explore the inter-relationships between the indicators and impact of these relationships on the BSE SENSEX. The study is envisioned to facilitate the investor in taking the right decision while investing.

OBJECTIVES

1. To review and understand the functioning of economic indicators on stock market performance
2. To find out the impact of individual economic indicator on the performance of BSE SENSEX
3. To study the impact of selective multiple economic indicators on the performance of BSE SENSEX
4. To predict the value of BSE SENSEX with respect to selective economic indicators

5. To establish the relationship between change in value of economic indicators and change in the value of BSE SENSEX.
6. To suggest the guidelines to investors with respect to Indian economic environment

HYPOTHESES:

H_{o1}: There is no relationship between the individual economic indicator and BSE SENSEX performance

Ho2: There is no relationship between the selective economic indicators and BSE SENSEX performance

Ho3: There is no Cause and Effect relationship between the selective economic indicators and BSE SENSEX performance

METHODOLOGY

The Study: Exploratory

The Sample: The sample will be taken from various websites of RBI, BSE, EPW research foundation, indiastat.com, Trading Economies, etc. taking into consideration the base year of the economic indicators.

The time frame for the literature review for the study would be 10 years (i.e. from 2004 to 2013). The other basis would be the data period between 2004 to 2013 because during this period Indian stock markets have undergone substantial policy changes characterized by the revival of private foreign capital flows to emerging market economies, flexible exchange rates, strong economic growth, credit market crisis in the United States and sharp fall in Asian market (graph has been

mentioned in introduction). These changes have affected the movement in index and magnitude of volume trades in the market in different ways.

Again the selection of BSE SENSEX is based on review of literature, as most of researchers have selected the major index of the country for their studies. Bombay Stock Exchange is the oldest stock exchange in Asia and today, it is the world's 5th most active in terms of number of transactions handled through its electronic trading system. It is also in the top ten of global exchanges in terms of the market capitalization of its listed companies.BSE have facilitated the growth of the Indian corporate sector by providing with an efficient capital raising platform. The BSE Index, SENSEX, is India's first and most popular Stock Market benchmark index.

Type of Data: Secondary Data

Tool for Data Analysis: Simple Regression Analysis and Multivariate Analysis.

SCOPE OF THE STUDY

The outcome of this study is going to have implications for investors, academician, policy makers, regulatory authorities, financial advisers, retail and corporate investors.

REFERENCES

1. Muradoglu, G.et.al. (2001). Is there a long run relationship between stock returns and monetary variables: Evidence from an emerging market? *Applied Financial Economics,* vol. 11 (6): 641-49. http://dx.doi.org/10.1080/09603100110094411

2. Martinez, M.A., & G. Rubio. (1989). Arbitrage Pricing with Macroeconomic Variables: An Empirical Investigation using Spanish Data, Working Paper, Universidad del Pais Vasco.

3. Pan Ming-Shiun et al. (2007). Dynamic Linkages between Exchange Rates and Stock Prices: Evidence from East Asian Markets. *International Review of Economics and Finance,* I

4. Pearce, D. K., & Roley, V.V. (1988). Firm characteristics, unanticipated inflation, and stock returns. *Journal of Finance,* 43: 965-981. http://dx.doi.org/10.2307/2328146

5. Poon S, Taylor J. (1991). Macroeconomic Factors and the U.K. Stock Market. *Journal of Business Finance & Accounting,* 18(5): 619-636.

6. Wongbanpo, P., & Sharma, S. C. (2002). Stock market and macroeconomic fundamental dynamic interactions: ASEAN-5 countries. *Journal of Asian Economics,* 13: 27-51. http://dx.doi.org/10.1016/S1049-0078(01)00111-7

7. Levine, R. Financial Development and Economic Growth: Views and Agenda. 1997. http://web.nps.navy.mil/~relooney/levine.pdf 23.

CHAPTER OUTLINE

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4. Methodology
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References

Appendices